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IT is no exaggeration to affirm, says Mr. Simon, the medical officer of health to the city of London, that the unrestricted supply of water "is the first essential of decency, of comfort, and of health; that no civilization of the poorer classes can exist without it; and that any limitation to its use in the metropolis is a barrier, which must maintain thousands in a state of the most unwholesome filth and degradation."* In the metropolis at present (we ought to say in England), the supply of water is but a fraction of what it should be; and its quality is for the most part infamously bad. Thousands and thousands of the population have no supply of it at all to their houses, and where it is laid on, the quantity is wholly insufficient, and the cost improperly great. For the sewers there is none, and without it there can be no effectual drainage. We have already suffered severely in consequence, and causes are in operation, especially in the metropolis, which will increase the evils at a fearful rate.

The connection between disease and bad water is established beyond cavil: the effect which the contamination of wells had in producing cholera in many places, is proved beyond the shadow of a doubt. The high rate of mortality on the south side of the Thames may be ascribed mainly to the fact, that the water-works for that part of London draw their supply from a spot in the Thames horridly polluted by sewers, and that many of the private wells are made poisonous by the cesspools, which are nearly as deep as the wells, and often close to them.

We must at any cost have pure water, and plenty of it,—a supply not intermittent, but constant and universal.

A glance at the daily papers will show how general this feeling is: notices of application to Parliament for powers to obtain and sell water, and reports of public meetings to consider the subject, meet the eye everywhere. Manchester, Salford, Salisbury, Southampton, and other provincial towns, are in the field. For the metropolis there are half-a-dozen schemes, without saying anything of the applications by the New River Company, the Kent Water-works, and the Lambeth Water-works Company, for extended powers.

One Company proposes to supply London from the Thames at a point near Mapledurham Lock, county of Oxford, with reservoirs at Caversham.

The "Thames Chalk Filtered Company" desires "to divert a portion of the water of the river Thames from its present channel; to convey it by aqueducts to shafts sunk on the bank of the river, into the chalk stratum of the London Basin; and to form such shafts, with accompanying shafts, and other necessary works, into filters for purifying, by means of the chalk, the Thames water so conveyed."

The "London Spring-water Company" is projected "for the purpose of procuring a supply of pure water from the chalk formation, by means of shafts to be sunk in the neighbourhood of Watford, which water is proposed to be lifted into reservoirs on Stanmore-common, to the respective heights of 400 and 490 feet above the Trinity high-water mark at London-bridge, and brought to London and the suburbs in capacious pipes along the Edgeware-road."

And the intention of "The Henley-on-Thames and London Aqueduct Company," to which we have before referred, is shown in their name. They propose the appointment of commissioners, to whom the execution of the Act, when obtained, is to be entrusted; to have five reservoirs around the metropolis; and to buy up existing water companies.

The public stir on this subject is further shown by the attendance on the General Board of Health of various deputations, including Archdeacon Sinclair, churchwardens Bellworthy and Collins, and other parishioners of Kensington, who set forth the very defective supply of water to that parish. The Archdeacon pointed out, that close to where the water was taken for the Southwark and for the Chelsea Company there was a current emptying itself into the river, which was of such a character as necessarily to injure the surrounding water. A large portion of that must necessarily remain with the other; and although the company he had mentioned took pains to filter the water, the evil could not be thereby at all thoroughly remedied.

Mr. Chadwick, in the explanation which he gave to each deputation *seriatim*, stated that the Metropolitan Sanitary Commission had the subject in hand, and that certain principles had been laid down by the "Health of Towns Commission," which would, without doubt, regulate the Metropolitan Commissioners; as, for example, that the supply of water should be constant and not intermittent. It might be settled and taken that the works of water-supply and drainage works should be under one and the same management, and that management a public one. It had been shown recently, that while houses and neighbourhoods were made damp by the water pumped in, for the removal of which suitable drains were not provided, where drains *were* provided decomposed refuse accumulated, from the want of water being properly applied to cleanse them. Unless cesspools were abolished, no crowded neighbourhood could continue to be healthy, and cesspools could only be abolished when supplies of water were available. At every step the necessity and practical importance of the conclusion, for the sake of economy, as well as efficiency, that the water-supply and drainage must be under one and the same administrative management, and that management a public one, whatever it might be, was demonstrated. Another principle established was, that there had been, and could be, no public gain by the so-called competition of several or numerous capitals on the same field of supply. It had likewise been shown that private companies, which had to depend for their returns on voluntary custom, could not afford to supply water at so low a charge as might be done by a universal rate if properly managed.

Another indication of public interest in the question was afforded by the rooms of the Institute of British Architects, on Monday evening last, when the Very Rev. Dr. Buckland delivered an address on *Artesian Wells*. There were 197 members and visitors present, and those who know the meeting rooms will not require to be told that they were inconveniently crowded.*

We had prepared a nearly *verbatim* report of the Dean's address, but the morning papers having given unusually full reports, it would come as a twice-told tale to many of our readers, and we therefore condense it. The Dean began by observing, that the architecture of the globe was a subject which he thought ought not to be foreign to the consideration of the members, for he must submit that no architect could perfectly understand his profession, unless he had acquired some knowledge of the materials with which he had to deal; and he believed no one would deny that, had their ancestors known as much as they did now touching the durability of various kinds of stone employed in the construction of ecclesiastical and castellated buildings, they would not have to deplore the ruin of so many of these edifices (?). It would be his duty that night to direct their attention to the architecture of that particular portion of the earth which they themselves inhabited—a subject possessing an interest literally of vital importance. It was, as had been proved by the events of the last six months, a question of life or death to thousands and tens of thousands in this great metropolis, whether they should have *the means of obtaining an abundant supply of fresh water*. It was, unfortunately, too notorious that the supply of water was at the present time awfully defective, and the last month had been fertile in schemes for supplying that defect. He rebutted the taunts which had been thrown out against him as a non-practical man by such practical men as, in 1825, persuaded the Earl of Abingdon to spend large sums of money in digging for coal in the Oxford clay, a folly, in exposing which he at the time went so far as to say he would willingly be burnt in the broad street with the first cart-load of coal they obtained. But the *auto da fé* did not take place, for there he was unscathed. He had studied the subject of Artesian wells for years, and had said, in his Bridgewater Treatise, thirteen years ago, all that he knew even at this time. There was nothing theoretical about his statements, the deductions followed as surely from sections of the earth, which had been made foot by foot, as from the section of a building. If those persons who are concerned in the subject were not acquainted with what he had said, it was to their shame. London and Paris were each of them situated on a basin of impervious clay, which rested upon strata of porous gravel and chalk. There was no imaginary central abyss which would furnish, if it once were reached, an everlasting supply of water. It was now admitted that the only source of fresh water was the sea, from which it was indirectly conveyed by means of evaporation to the earth, on which it fell from the clouds in fertilizing showers. If rain water was then of such primary consequence, the question was, where, in the neighbourhood of London, was there the most of it,

* We are glad to see that the "Report on the Sanitary condition of London, for the year 1849," by Mr. Simon, is printed in a separate form. It contains nothing new, it is true,—little but what will be found in our pages urged and re-urged,—but the various points in the inquiry are sensibly and calmly stated, and all being brought together in this pamphlet, the distribution of it can scarcely fail to produce advantageous results. We hope to see the corporation act immediately on some of its suggestions.

* Amongst them, in addition to those named hereafter, were Lord Ebrington, Mr. H. T. Hope, M.P., Mr. Maugles, M.P., Mr. J. F. Stanford, M.P., Mr. Walpole, M.P., Dr. Arnott, Rev. H. Milman, Capt. O'Brien, Sir C. Trevelyan, Sir Fortunatus Dwarris, Messrs. T. L. Donaldson, Scoles, Mee, Bellamy, Moseris, Mair, Knowles, Syd. Smirke, H. E. Kendall, W. R. Hamilton, F.R.S., Booth, Pownall, Fowler, Lee, Smith, Ashton, Papworth, Roumieu, Ferrey, Wood, Cole, Charles Mathew, W. C. Mylne, Jas. Fergusson, W. Burn, Woodthorpe, Bury, Tarring, Hopkins, H. W. Billings, Oliver, Rundell, Williams, Judge, Edm. Nicholl, Dobson, Eddrup, Lockyer, Ewans, Hemesley, Clayton, Waring, C. Barry, Jun., Boyce, G. Wallians, W. S. Gaskers, Wyatt Papworth, Godwin, Phillips, Borthwick, Habewell, Severn, Dr. Bett, Messrs. Pope, Wigram, Page, Fred. Peel, Porter, Coleman, Richmond, Allason, Wilks, Burnell, Woolrych, Johnstone, Hussey, Gregory, Dighton, Christian, Snell, F. Ralph C. Manley, Thomson, Kerr, York, George Rennie, Gooch, Coleman, Salvin, Porter, E. W. Brayley, Geo. Godwin, &c. &c.

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